

WHAT IS CLAIMED IS:

1. An optical interference display panel, comprising:

a substrate;

5 a protection structure, adhered to the substrate with an adhesive; and
an optical interference reflection structure, located between the substrate
and the protection structure.

2. The optical interference display panel of claim 1, wherein the optical

10 interference reflection structure comprises:

a first electrode;

a second electrode, wherein the second electrode is situated in parallel
with the first electrode substantially; and

a support, located between the first electrode and the second electrode
15 to form a cavity.

3. The optical interference display panel of claim 1, wherein the
protection structure is a flat protection structure or a U-shaped protection
structure.

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4. The optical interference display panel of claim 1, wherein a material of
the protection structure is glass, plastic, organic polymer or inorganic polymer.

5. The optical interference display panel of claim 1, wherein the substrate and the protection structure are airtight to prevent the optical interference reflection structure from being damaged by an external environment.

5 6. The optical interference display panel of claim 1, wherein the adhesive comprises spacers, and the spacers keep a predetermined distance between the protection structure and the substrate to prevent the protection structure from damaging the optical interference reflection structure.

10 7. The optical interference display panel of claim 1, wherein the adhesive comprises a UV glue or a thermosetting adhesive.

8. An method for manufacturing an optical interference display panel, the method comprising:

15 providing a substrate;
 forming an optical interference reflection structure on the substrate; and
 adhering a protection structure to the substrate in order to position the optical interference reflection structure between the protection structure and the substrate.

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9. The method of claim 8, wherein the optical interference reflection structure comprises:

 forming a first electrode on the substrate;
 forming a sacrificial layer on the first electrode;

forming a plurality of first openings in the first electrode and the sacrificial layer;

forming a support in each of the first opening;

forming a second electrode on the sacrificial layer and the supports; and

5 removing the sacrificial layer by a release etching process.

10. The method of claim 8, wherein the protection structure is a flat protection structure or a U-shaped protection structure.

10 11. The method of claim 8, wherein a material of the protection structure is glass, plastic, organic polymer or inorganic polymer.

12. The method of claim 8, wherein the substrate and the protection structure are airtight to prevent the optical interference reflection structure from
15 being damaged by an external environment.

13. The method of claim 8, wherein the adhering step comprises adhering the protection structure and the substrate with an adhesive.

20 14. The method of claim 13, wherein the adhesive comprises spacers, and the spacers keep a predetermined distance between the protection structure and the substrate to prevent the protection structure from damaging the optical interference reflection structure.

15. The method of claim 13, wherein the adhesive comprises a UV glue or a thermosetting adhesive.